

REMARKS

Claims 1-22 are pending in this application. By this Amendment, claim 1 is amended. Reconsideration of the application is respectfully requested.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments:

(a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments amplify issues previously discussed throughout prosecution; and (c) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

The courtesies extended to Applicants' representative during the September 1 personal interview by Examiner Culbert, are gratefully appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

The Office Action rejects claims 1, 2 and 4-19 under 35 U.S.C. §103(a) over Qiu et al. (U.S. Patent Application Publication No. 2003/0029705) in view of IBM Technical Disclosure Bulletin No. 82024500 (IBM); claims 1, 2, 5-14 and 19-22 under 35 U.S.C. §103(a) over Hichwa et al. (U.S. Patent No. 6,303,885) in view of Sigloch et al. (U.S. Patent Application Publication No. 2004/0022484); claims 15, 16 and 20-22 under 35 U.S.C. §103(a) over Qiu in view of IBM and Hichwa; claim 3 under 35 U.S.C. §103(a) over Qiu in view of IBM, and further in view of Wood (U.S. Patent No. 6,367,251); and claim 3 under 35 U.S.C. §103(a) over Hichwa in view of Sigloch, and further in view of Wood. The rejections are respectfully traversed.

In particular, none of the applied references, alone or in combination, disclose or suggest a method of fabricating a bistable microelectromechanical system based system that

includes lithographically defining at least one beam, providing a stop to contact the at least one beam before the at least one beam reaches the position of the second stable state, and providing a ridge on the stop to reduce stiction between the stop and the at least one beam, wherein the at least one beam is biased against the stop, as recited in independent claim 1.

Support for this feature can be found in the specification at, for example, Section 0063.

The Office Action admits that neither Qiu nor Hichwa disclose or suggest providing optical fibers between a position of a first and a second stable state (Office Action, page 2, lines 18-19; page 3, lines 24-25). Moreover, Qiu teaches a bistable structure that includes a deflection element with mechanically constrained endpoints (Abstract), but does not disclose or suggest a stop which purpose is to bias the beam against the stop. IBM teaches a fiber optic switch in which a fiber is carried by a curved foil with two stable positions (Disclosure text). However, IBM fails to cure deficiencies in Qiu in disclosing or rendering obvious providing a stop to contact the fiber optic beam before reaching a second stable position in order to bias the fiber optic beam against the stop.

Sigloch teaches a fiber optic switch with a fiber optic switching element in which a moving fiber is positioned by a switching body on a first stop in front of a first fiber or on a second stop in front of a second fiber (Abstract). However, the first and second stop in Sigloch (elements 3 and 5) are merely provided to prevent the moving fiber 1 from striking the end walls of the cavity formed by the body 8 and the cover 10 (paragraph 0035), and not to bias the fiber against a second stable position of the fiber. Accordingly, Sigloch fails to cure deficiencies in Hichwa in disclosing a method for fabricating a bistable microelectromechanical system that includes providing optical fibers between a position of the first stable state and a position of a second stable state, providing a stop to contact the at least one beam before the at least one beam reaches the position of the second stable state, and providing a ridge on the stop to reduce stiction between the stop and the at least one

beam, wherein the at least one beam is biased against the stop, as recited in independent claim 1. Accordingly, independent claim 1, and its dependent claims, are patentable over a combination of the applied references. Thus, withdrawal of the rejections of the claims under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-22 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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